CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 89-094
NPDES PERMIT NO. CA0028401

REISSUANCE OF
WASTE DISCHARGE REQUIREMENTS FOR

PENNZOIL COMPANY
ALAMEDA, ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. Pennzoil Company, (hereinafter called the discharger), has submitted an application dated August 8, 1988, for reissuance of waste discharge requirements under the National Pollutant Discharge Elimination System (NPDES) Permit No. CA0028401 for its plant located at 2015 Grand Street, Alameda California.

2. The discharger is currently subject to compliance with its NPDES permit Order No. 83-47, adopted by the Board on November 16, 1983.

3. The discharger operates a lube oil blending and packaging plant. The bulk materials consisting of petroleum base oils and lubricating oil additives are received by rail and stored in a tank farm surrounded by a concrete wall. Attendent to the plant activity, are a truck and tank car loading and unloading racks, a truck dock yard, a warehouse, and maintenance shop.

4. The discharge consists of stormwater runoff which is collected from separate areas of the property and discharged through two outfalls.

   Waste 001 is uncontaminated stormwater from the truck dock yard at the east side of the plant property which flows through an oil/water separator to Outfall 001 located next to the maintenance shop on the southeast corner of the property. Waste 002 is contaminated stormwater from the tank farm, railcar and tank truck loading/unloading areas located at the west side of the plant property which flows through an oil/water separator to Outfall 002 located next to the entrance to this yard on Grand Street. Both outfalls discharge into a 48-inch storm sewer which runs parallel to the property and flows to the Oakland Estuary, a tributary to San Francisco Bay.

5. The Regional Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 17, 1986. The Basin Plan contains water quality objectives for San Francisco Bay and the Oakland Estuary.

6. The beneficial uses of San Francisco Bay, Oakland Estuary, and contiguous water bodies are:

   a. Water contact recreation
   b. Non-contact water recreation
   c. Navigation
   d. Commercial and sport fishing
   e. Wildlife habitat
   f. Fish spawning and migration
   g. Industrial service and process supply
   h. Shellfish harvesting
   i. Estuarine habitat
   j. Preservation of rare and endangered species

7. Effluent limitation and toxic effluent standards established pursuant to Sections 301, 304, and 307 of the Clean Water Act and amendments thereto are applicable to the discharge.

8. The Basin Plan prohibits discharge of any wastewater which has particular characteristic of concern to beneficial uses at any point at which the wastewater does not receive a minimum initial dilution of 10:1, or into any nontidal water or dead-end slough or similar confined waters, or its immediate tributaries.

9. The Basin Plan provides that exceptions to this discharge prohibition will be considered for discharges where:

   a. an inordinate burden would be placed on the discharger relative to beneficial uses protected and an equivalent level of environmental protection can be achieved by alternate means, such as an alternative discharge site, a higher level of treatment, and/or improved treatment reliability; or

   b. a discharger is approved as a part of a reclamation project; or

   c. it can be demonstrated that net environmental benefits will be derived as a result of the discharge.

10. The Board will consider granting an exception to the Basin Plan noted in Finding 9. a. above, on the condition that the discharger document:

    a. inordinate burden based on cost relative to beneficial uses protected to meet the initial 10:1 dilution or to connect to the sewer district; and

    b. that an equivalent level of environmental protection can be achieved by alternate means such as by providing plant improvements which assures that:

       1. the contaminated stormwater runoff Waste 002 is adequately segregated from noncontaminated areas; and the contaminated stormwater from the tank farm is retained for testing and the necessary treatment to ensure it meets effluent limits prior to discharge.

2. a Best Management Practice Plan is provided which addresses the prevention of potential release of pollutants or other materials deleterious to surface and ground waters from areas tributary to Waste 001, including the truck dock yard and from areas tributary to Waste 002, including the tank farm and any ancilliary activities, including storage areas, plant site runoff, in-plant transfer, process and material handling areas, loading and unloading operations, and waste treatment/containment areas.

3. completion of the above improvements will be accomplished and implemented by no later than October 31, 1989.

11. Effluent limitation and toxic effluent standards established pursuant to Sections 301, 304, and 307 of the Clean Water Act and amendments thereto are applicable to the discharge.

12. Effluent limitation guidelines requiring the application of best available technology economically achievable (BAT) for this point source category have not been promulgated by the U. S. Environmental Protection Agency. Effluent limitations of this Order are based on the Basin Plan, State Plans and Policies, current plant performance, and best professional judgment. The limitations are considered to be those attainable by BAT, in the judgment of the Board.

13. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21000 of Division 13) of the Public Resources Code (CEQA) pursuant to Section 133889 of the California Water Code.

14. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the proposed discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

15. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that Pennzoil Company in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. The discharge of all process wastes, washdown water, solvents, oils, or other products of petroleum origin to state waters is prohibited, except in accordance with waste discharge requirements.

2. The discharge of all conservative toxic and deleterious substances above those levels which can be achieved by a program acceptable to the Board is prohibited.

B. Effluent Limitations

1. The discharge of all stormwater to Outfall 002, including stormwater from the tank farm shall not contain constituents in excess of the following limits:

Constituents	Units	Average Monthly	Average Weekly	Maximum Daily
Settleable Solids	ml/l/hr	0.1		0.2
Suspended Solids	mg/l	30	45	
Oil and Grease	mg/l	10		20
pH	pH units			6.5 - 8.5
Arsenic	ug/l			20
Cadmium	ug/l			10
Total Chromium	ug/l			11
Copper	ug/l			20
Lead	ug/l			5.6
Mercury	ug/l			1
Nickel	ug/l			7.1
Silver	ug/l			2.3
Zinc	ug/l			58
Total PAH's *	ug/l			15

* Total PAH's - total polynuclear aromatic hydrocarbons as detected by EPA Method 610.

2. The discharge of Waste 002, including stormwater from the tank farm shall not contain Total Petroleum Hydrocarbons as oil exceeding an instantaneous maximum concentration of 50 ug/l as measured by modified EPA test method 8015.

3. The discharge of Waste 002 shall meet the following limits of toxicity:

The survival of three-spine stickleback and rainbow trout (or fathead minnow) in a 96-hour static-renewal bioassay of the effluent as discharged shall achieve a median of 90% survival for three consecutive samples and a 90 percential value of not less

than 70% survival for ten consecutive samples.

4. Areas tributary to Outfall 001 and 002 are subject to Best Management Practices (BMP)that are acceptable to the Executive Officer.

   The BMP shall include, but not be limited to those practices (including technological, economic and operational considerations), within the control of the discharger and approved by the Executive Officer, which are the most effective and practicable means of preventing or reducing the amount of pollutants generated by runoff that is intercepted and collected for the discharge from the points described above.

C. Receiving Water Limitations

1. The discharge of Wastes 001 and 002 shall not cause the following conditions to exist in waters of the State at any place.

   a. Floating, suspended, or deposited macroscopic particulate matter or foam;

   b. Bottom deposits or aquatic growths;

   c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

   d. Visible, floating, suspended, or deposited oil or other products or petroleum origin;

   e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the surface:

a.	Dissolved Oxygen	5.0 mg/l minimum - median for any three consecutive months shall not be less than 80% saturation. When natural factors cause less concentration(s) than specified above, then discharge shall not cause further reduction in the concentration of dissolved oxygen.
b.	pH	Variation from natural ambient pH by more than 0.5 pH units.

3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments hereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. PROVISIONS

1. Neither the treatment nor the discharge of pollutants shall create a nuisance as defined in the California Water Code.

2. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 83-47 adopted on November 16, 1983. Order No. 83-47 is hereby rescinded.

3. The discharger shall comply with all sections of this Order immediately upon its adoption by the Board, except as provided below.

4. The discharger shall comply with the effluent limitations and prohibitions of this order by October 31, 1989. Compliance shall be achieved in accordance with the following time schedule in Provision 5 below.

5. Pursuant to Finding 10. of this order, the discharger shall submit documentation in accordance with the following time schedule:

   a. Submit documentation for Finding 10.a. by July 1, 1989;

   b. Submit a workplan and progress report pursuant to Finding 10.b. on the proposed improvements by July 31, 1989;

      Submit a report by September 30, 1989 on the completed improvements;

      Submit a Best Management Practice plan to the Executive Officer by September 30, 1989. The BMP shall be consistent with the EPA regulations 40 CFR 125, Subpart K and the general guidance contained in the "NPDES Best Management Guidance Document", EPA Report No. 600/9-79-045, December 1979 (revised June 1981). The BMP shall specifically address segregation of non-contaminated stormwater from contaminated areas. A BMP program acceptable to the Executive Officer shall be implemented by October 31, 1989.

      Submit a report by November 30, 1989 on full compliance achieved.

6. The discharger shall prepare and update by June 30 of each year, a contingency plan as required by Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the Calfifornia

Water Code.

7. The discharger shall comply with the self-monitoring program as adopted by the Board and as may be amended by the Board pursuant to EPA regulations 40 CFR 122.62, 122.63, and 124.5. Upon review of the data submitted as part of this program, the Board may at any time, revise the Order to include effluent limits for those constituents determined to be of concern.

8. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions", dated December 1986.

9. All applications, reports, or information submitted to the Regional Board shall be signed and certified pursuant to Environmental Protection Agency regulations (40 CFR 122.41K).

10. Pursuant to Environmental Protection Agency regulations (40 CFR 122.42(a), the discharger must notify the Regional Board as soon as it knows or has reason to believe (1) that they have begun or expect to begin the use or manufacture of a pollutant not reported in the permit application, or (2) a discharge of toxic pollutants not limited by this permit has occurred, or will occur, in concentrations that exceed the specified limits.

11. This permit shall be modified or alternatively revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b) (2) (c), and (d), 303, 304(b) (2) and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

    a. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

    b. Controls any pollutant not limited in the permit.

    The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

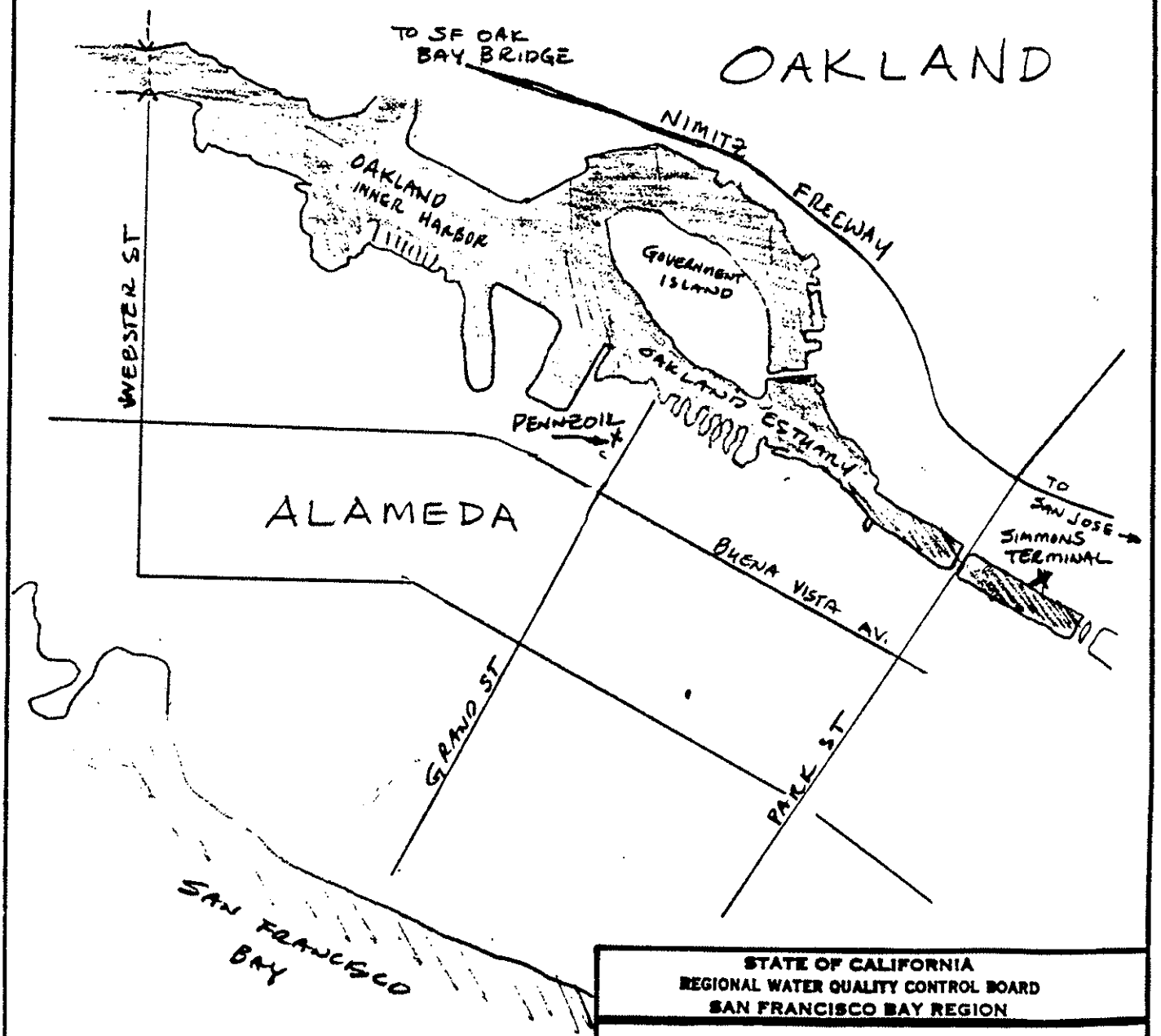
12. This Order expires June 21, 1994. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.

13. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Federal Water Pollution Control Act or amendments thereto, and shall become effective ten days after the date of its adoption, provided the Regional Administrator for the Environmental Protection Agency has no objection.

I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on June 21, 1989.

STEVEN R. RITCHIE
Executive Officer

Attachments:
Location Map
Standard Provisions &
Reporting Requirements, December 1986
Self-Monitoring Program
Resolution No. 74-10



STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

LOCATION MAP

PENNZOIL

DRAWN BY:	DATE:	DRWG. NO.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

PENNZOIL COMPANY

ALAMEDA, ALAMEDA COUNTY

NPDES NO. CA0028401

ORDER NO. 89-094

CONSISTS OF

PART A, (DATED 12/86)

AND

PART B

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. EFFLUENT

Station	Descriptions
001	At a point in the 001 outfall for the stormwater runoff at the southeast side of the plant property, between the point of discharge into the storm sewer and the point at which all waste tributary to that outfall is present.
002	At a point in the 002 outfall for the stormwater runoff at the southwest side of the plant property, between the point of discharge into the storm sewer and the point at which all waste tributary to that outfall is present.

II. SCHEDULE OF SAMPLING, MEASUREMENTS, AND ANALYSES

1. The schedule of sampling, measurements and analysis for stations E001 and E002 shall be that given as Table I.

2. Sample collection, storage and analysis shall be performed according to the latest 40 CFR Part 136 or other methods approved and specified by the Board.

III. MISCELLANEOUS REPORTING

1. Strip charts of the effluent pH record must be retained with other laboatory records, and made available for inspection by Board staff.

2. The discharger shall retain and submit (when required) the following information concerning the monitoring program for organic and metallic pollutants.

   a. Description of sample stations, times and procedures.

   b. Description of sample containers, storage and holding time prior to analysis.

   c. Quality assurance procedures together with any test results for replicate samples, sample blanks, and any quality assurance tests, and the recovery percentages for the internal and surrogate standards.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 89-094.

2. Is effective on the date shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revision will be ordered by the Executive Officer.

STEVEN R. RITCHIE
Executive Officer

6/21/89
Effective Date

Attachment: Table I

TABLE I

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Station	Analyses	Unit	Type of Sample	Frequency of Analysis
All 'E' stations	Flow	gpd	continuous	continuous
	Oil & Grease (1)	mg/l kg/day	grab	monthly
	Total Suspended Solids	mg/l	grab	monthly
	Settleable Solids	ml/l/hr	grab	monthly
	pH	pH units	grab	monthly
	Dissolved Oxygen	mg/l & % saturation	grab	monthly
	Table 4-1 Metals: (2) Arsenic Cadmium Total Chromium Copper Lead Mercury Nickel Silver Zinc	ug/l kg/day	grab	monthly
	Toxicity 96-hr. (3)	% survival	grab	2/year
	EPA Method 601 for Purgeable Organics (2)(4)	ug/l	grab	monthly
	EPA Method 602 for: (2)(4) benzene chlorobenzene 1,2-dichlorobenzene 1,3-dichlorobenzene 1,4-dichlorobenzene ethylbenzene toluene xylene	ug/l	grab	monthly

TABLE I (continued)

Station	Analyses	Unit	Type of Sample	Frequency of Analysis
All 'E' Stations	EPA Method 610 (2)(4) for PAH's	ug/l	grab	monthly
	Modified EPA Method 8015 for Petroleum Hydrocarbon as oil	ug/l	grab	monthly
	All applicable standard observations			monthly

LEGEND FOR TABLE I

continuous - Continuous measurement during discharge. The flow rate for each month should be estimated if not measured and included in the report. Report reason for zero discharge during wet weather months.

grab - Take a minimum of 3 grab samples on the day of sampling. The first sample for each day shall be taken during the first hour of discharge, and the others at equal time intervals thereafter.

monthly - Monthly during the first rainfall

2/year - Once in the first quarter and fourth quarter of the year

FOOTNOTE

(1) Oil and Grease sampling shall consist of 3 grab samples taken at 2-hour intervals during the sampling day, with each grab being collected in a glass container. The entire volume of each sample shall be composited prior to analysis. Each glass container used for sample collection or mixing shall be thoroughly rinsed with solvent rinsings as soon as possible after use, and the solvent rinsings shall be added to the composite wastewater sample for extraction and analysis.

FOOTNOTE (continued)

(2) When at least one year of monitoring results have been submitted, the data will be evaluated for the need to reduce or expand the monitoring program relative to the parameters and sampling frequencies.

(3) The toxicity test shall be a static-renewal test using two test fish species, stickleback, and rainbow trout or fathead minnow.

(4) Identify all peaks above 1.0 ug/l.